



September 29, 2014

HELLENBRAND INCORPORATED
JILL MCDONALD
404 MORAVIAN VALLEY ROAD
WAUNAKEE WI 53597

Re: Description: WATER TREATMENT DEVICE - SOFTENER/CATION EXCHANGE
Manufacturer: HELLENBRAND INCORPORATED
Product Name: E3, H-100 AND PROMATE SERIES WATER SOFTENERS
Model Number(s): E3-024, E3-024-948, E3-032, E3-032-10, E3-032-1054, E3-048, E3-048-1354, E3-064, E3-064-1465, H100-24ED, H100-32ED, H100-32-10ED, H100-48ED, H100-64ED, H100-96ED, H100-128ED, H100-160ED, H125-32-10, H125-48, H125-64, H125-96, H125-128, H125-160, H125-192, PM1-24ED, PM1-32ED, PM1-32-10ED, PM1-48ED, PM1-64ED, PM1-96ED, PM1-128ED, PM1-160ED, PM5-024, PM5-024RD, PM5-032, PM5-032RD, PM5-032-10, PM5-032-10RD, PM5-048, PM5-048RD, PM5-064, PM5-064RD, PM5-096, PM5-096RD, PM5-128, PM5-128RD, PM5-160, PM5-160RD, PM5-192, PM5-196RD, PM6-024, PM6-032, PM6-032-10, PM6-048, PM6-064, PM6-096, PM6-160, PM6-192, PM7.0-024TA, PM7.0-032TA, PM7.0-032-10TA, PM7.0-048TA, PM7.0-064TA, PM7.0-096TA, PM7.0-128TA, PM7.0-160TA AND PM7.0-192TA
Product File No: 20140281

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of September 2019.

This approval supersedes the approval issued on August 17, 2012 under product file number 20120275.

This approval is contingent upon compliance with the following stipulation(s):

- This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturer's published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 267-9787.
- If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater volumes, total dissolved solids and chloride discharges are minimized.

Based on testing data submitted to and reviewed by the department, this approval recognizes that these plumbing products will reduce the concentration of contaminants as specified on pages 1 through 2 of this letter.

WATER SOFTENING CAPABILITIES
PRODUCT FILE NUMBER 20140281
TABLE 1 OF 1

Model Numbers	Tested Capacities*								Flow Rate vs.
ProMate Series	Rating 1		Rating 2		Rating 3		Rating 4		pressure loss
Demand Initiated Regeneration	Grains	Pounds	Grains	Pounds	Grains	Pounds	Grains	Pounds	gpm @ psig
E ³ -024	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
E ³ -032	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
E ³ -032-10	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	11.3 @ 10.0
E ³ -048	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	10.5 @ 10.0
E ³ -064	45,870	12.0	53,300	16.0	56,120	20.0	64,620	30.0	14.2 @ 10.0
E ³ -024-948 ^Δ	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
E ³ -032-1054 ^Δ	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
E ³ -048-1354 ^Δ	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.5 @ 10.0
E ³ -064-1465 ^Δ	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	14.2 @ 10.0
H-100-24ED	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
H-100-32ED	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
H-100-32-10ED	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	11.3 @ 10.0
H-100-48ED	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	10.5 @ 10.0
H-100-64ED	45,870	12.0	53,300	16.0	56,120	20.0	64,620	30.0	14.2 @ 10.0
H-100-96ED	68,810	18.0	79,950	24.0	84,180	30.0	96,930	45.0	14.4 @ 10.0
H-100-128ED	91,750	24.0	106,600	32.0	112,240	40.0	129,240	60.0	15.1 @ 10.0
H-100-160ED	114,690	30.0	133,250	40.0	140,300	50.0	161,550	75.0	17.3 @ 10.0
H125-32-10	19,000	6.0	28,000	10.0	32,000	15.0	-	-	22.0 @ 15.0
H125-48	28,500	9.0	42,000	15.0	48,000	22.5	-	-	19.0 @ 15.0
H125-64	38,000	12.0	56,000	20.0	64,000	30.0	-	-	25.0 @ 15.0
H125-96	57,000	18.0	84,000	30.0	96,000	45.0	-	-	24.0 @ 15.0
H125-128	76,000	24.0	112,000	40.0	128,000	60.0	-	-	25.0 @ 15.0
H125-160	95,000	30.0	140,000	50.0	160,000	75.0	-	-	27.0 @ 15.0
H125-192	114,000	36.0	168,000	60.0	192,000	90.0	-	-	26.0 @ 15.0
PM1-24ED	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
PM1-32ED	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM1-32-10ED	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	11.3 @ 10.0
PM1-48ED	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	10.5 @ 10.0
PM1-64ED	45,870	12.0	53,300	16.0	56,120	20.0	64,620	30.0	14.2 @ 10.0
PM1-96ED	68,810	18.0	79,950	24.0	84,180	30.0	96,930	45.0	14.4 @ 10.0
PM1-128ED	91,750	24.0	106,600	32.0	112,240	40.0	129,240	60.0	15.1 @ 10.0
PM1-160ED	114,690	30.0	133,250	40.0	140,300	50.0	161,550	75.0	17.3 @ 10.0
PM5-024	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
PM5-024RD	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
PM5-032	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM5-032RD	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM5-032-10	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM5-032-10RD	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM5-048	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	10.5 @ 10.0
PM5-048RD	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	10.5 @ 10.0
PM5-064	45,870	12.0	53,300	16.0	56,120	20.0	64,620	30.0	14.2 @ 10.0
PM5-064RD	45,870	12.0	53,300	16.0	56,120	20.0	64,620	30.0	14.2 @ 10.0
PM5-096	68,810	18.0	79,950	24.0	84,180	30.0	96,930	45.0	14.4 @ 10.0
PM5-096RD	68,810	18.0	79,950	24.0	84,180	30.0	96,930	45.0	14.4 @ 10.0
PM5-128	91,750	24.0	106,600	32.0	112,240	40.0	129,240	60.0	15.1 @ 10.0
PM5-128RD	91,750	24.0	106,600	32.0	112,240	40.0	129,240	60.0	15.1 @ 10.0
PM5-160	114,690	30.0	133,250	40.0	140,300	50.0	161,550	75.0	17.3 @ 10.0
PM5-160RD	114,690	30.0	133,250	40.0	140,300	50.0	161,550	75.0	17.3 @ 10.0
PM5-192	137,620	36.0	159,900	48.0	168,360	60.0	193,860	90.0	17.8 @ 10.0
PM5-192RD	137,620	36.0	159,900	48.0	168,360	60.0	193,860	90.0	17.8 @ 10.0
PM6-024	17,200	4.5	19,980	6.0	21,040	7.5	24,230	11.3	9.8 @ 10.0
PM6-032	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM6-032-10	22,930	6.0	26,650	8.0	28,060	10.0	32,310	15.0	10.1 @ 10.0
PM6-048	34,400	9.0	39,970	12.0	42,090	15.0	48,460	22.5	10.5 @ 10.0
PM6-064	45,870	12.0	53,300	16.0	56,120	20.0	64,620	30.0	14.2 @ 10.0
PM6-096	68,810	18.0	79,950	24.0	84,180	30.0	96,930	45.0	14.4 @ 10.0
PM6-128	91,750	24.0	106,600	32.0	112,240	40.0	129,240	60.0	15.1 @ 10.0
PM6-160	114,690	30.0	133,250	40.0	140,300	50.0	161,550	75.0	17.3 @ 10.0
PM6-192	137,620	36.0	159,900	48.0	168,360	60.0	193,860	90.0	17.8 @ 10.0
PM7.0-024TA	10,492	2.5	17,200	4.5	21,040	7.5	24,230	11.5	13.1 @ 15
PM7.0-032TA	13,972	3.3	22,930	6.0	28,060	10.0	32,310	15.0	13.0 @ 15
PM7.0-032-10TA	13,972	3.3	22,930	6.0	28,060	10.0	32,310	15.0	14.5 @ 15

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WATER SOFTENING CAPABILITIES
PRODUCT FILE NUMBER 20140281
TABLE 1 OF 1 (contd.)

Model Numbers	Tested Capacities*								Flow Rate vs. pressure loss
ProMate Series	Rating 1		Rating 2		Rating 3		Rating 4		
Demand Initiated Regeneration	Grains	Pounds	Grains	Pounds	Grains	Pounds	Grains	Pounds	gpm @ psig
PM7.0-048TA	20,958	5.0	34,400	9.0	42,090	15.0	48,460	22.5	14.1 @ 15
PM7.0-064TA	27,944	6.6	45,870	12.0	56,120	20.0	64,620	30.0	18.2 @ 15
PM7.0-096TA	41,916	9.9	68,810	18.0	84,180	30.0	96,930	45.0	19.2 @ 15
PM7.0-128TA	55,888	13.2	91,750	24.0	112,240	40.0	129,240	60.0	20.1 @ 15
PM7.0-160TA	69,861	16.5	114,690	30.0	140,300	50.0	161,550	75.0	22.7 @ 15
PM7.0-192TA	83,333	19.8	137,620	36.0	168,360	60.0	193,860	90.0	21.7 @ 15

* = The softener capacity rating is based on grains of hardness, due to calcium and magnesium cations, removed (as calcium carbonate) while producing soft water between successive regenerations and is related to the pounds of salt required for each regeneration. The tests run to generate the data for table 1 were conducted in accordance with NSF Standard 44. These devices are efficiency rated (ER) at the lowest salt dosages displayed for each model (i.e. "Rating 1").

Δ = High backwash flow rate models

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
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